

What is Claimed is:

1. An optical lens hole drilling guider for guiding an optical lens to form a through slot thereon, comprising:

a lower base member;

5 an upper guiding member spacedly overlapped on said base member to define a holding cavity therebetween for holding said optical lens in position, wherein said guiding member comprises first and second side guiders slidably mounted to each other in a side-by-side manner such that said second side guider is adapted to sidewardly slide with respect to said first side guider for fitting a width of said optical lens, wherein said  
10 guiding member further has first and second guiding slots formed on said second side guider to communicate with said holding cavity; and

a retaining device connecting said base member with said guiding member to selectively adjust a distance between said base member and said guiding member for securely retaining said optical lens within said holding cavity;

15 thereby, when said optical lens is securely retained within said holding cavity, said second side guider is sidewardly slid from said first side guider until one of said first and second guiding slots is aligned with a marking point of said optical lens such that a drilling tool is adapted to penetrate said optical lens at said marking point through said respective guiding slot so as to form said through slot on said optical lens.

20 2. The optical lens hole drilling guider, as recited in claim 1, wherein said base member has an elongated guiding channel formed thereon to align with said first and second guiding slots of said guiding member, wherein said guiding channel is a through slot and has a predetermined length at least larger than a distance between said first and second guiding slots for allowing said drilling tool passing through said base member  
25 through said holding cavity.

3. The optical lens hole drilling guider, as recited in claim 1, wherein said retaining device comprises a first locking unit connecting said first side guider with said base member in a vertically movable manner and a second locking unit which has an

elongated groove formed on said base member and comprises a second guiding arm having an elongated bottom portion positioned below said base member and upwardly extended to slidably penetrate through said second side guider through said elongated groove, and a second locking member rotatably mounted to said second guiding arm at a position above said second side guider to lock up said second side guider on said base member so as to adjustably lock up a distance between said second side guider and said base member, wherein said second guiding arm is driven to slide along said elongated groove when said second side guider is slidably extended from said first side guider.

4. The optical lens hole drilling guider, as recited in claim 2, wherein said retaining device comprises a first locking unit connecting said first side guider with said base member in a vertically movable manner and a second locking unit which has an elongated groove formed on said base member and comprises a second guiding arm having an elongated bottom portion positioned below said base member and upwardly extended to slidably penetrate through said second side guider through said elongated groove, and a second locking member rotatably mounted to said second guiding arm at a position above said second side guider to lock up said second side guider on said base member so as to adjustably lock up a distance between said second side guider and said base member, wherein said second guiding arm is driven to slide along said elongated groove when said second side guider is slidably extended from said first side guider.

5. The optical lens hole drilling guider, as recited in claim 3, wherein said second locking unit further comprises a second resilient element disposed in said holding cavity for applying an urging force against said second side guider.

6. The optical lens hole drilling guider, as recited in claim 4, wherein said second locking unit further comprises a second resilient element disposed in said holding cavity for applying an urging force against said second side guider.

7. The optical lens hole drilling guider, as recited in claim 1, wherein said base member further has a non-scratching upper surface and said guiding member further has a non-scratching bottom surface, wherein said non-scratching upper surface of said base member and said non-scratching bottom surface of said guiding member are arranged for contacting with a top side and a bottom side of said optical lens respectively when said optical lens is held within said holding cavity.

8. The optical lens hole drilling guider, as recited in claim 3, wherein said base member further has a non-scratching upper surface and said guiding member further has a non-scratching bottom surface, wherein said non-scratching upper surface of said base member and said non-scratching bottom surface of said guiding member are arranged for contacting with a top side and a bottom side of said optical lens respectively when said optical lens is held within said holding cavity.

9. The optical lens hole drilling guider, as recited in claim 6, wherein said base member further has a non-scratching upper surface and said guiding member further has a non-scratching bottom surface, wherein said non-scratching upper surface of said base member and said non-scratching bottom surface of said guiding member are arranged for contacting with a top side and a bottom side of said optical lens respectively when said optical lens is held within said holding cavity.

10. The optical lens hole drilling guider, as recited in claim 7, wherein said base member is shaped to form said non-scratching upper surface having a convex shaped for biasing said optical lens to enhance a contacting area between said base member and said optical lens.

11. The optical lens hole drilling guider, as recited in claim 8, wherein said base member is shaped to form said non-scratching upper surface having a convex shaped for biasing said optical lens to enhance a contacting area between said base member and said optical lens.

12. The optical lens hole drilling guider, as recited in claim 9, wherein said base member is shaped to form said non-scratching upper surface having a convex shape for biasing said optical lens to enhance a contacting area between said base member and said optical lens.

13. The optical lens hole drilling guider, as recited in claim 1, wherein said guiding member further comprises two edge protectors, each having a ring shape, formed around said first and second guiding slots to protect edge walls of said first and second guiding slots respectively.

14. The optical lens hole drilling guider, as recited in claim 4, wherein said guiding member further comprises two edge protectors, each having a ring shape, formed

around said first and second guiding slots to protect edge walls of said first and second guiding slots respectively.

15        15. The optical lens hole drilling guider, as recited in claim 9, wherein said guiding member further comprises two edge protectors, each having a ring shape, formed around said first and second guiding slots to protect edge walls of said first and second guiding slots respectively.

10        16. The optical lens hole drilling guider, as recited in claim 12, wherein said guiding member further comprises two edge protectors, each having a ring shape, formed around said first and second guiding slots to protect edge walls of said first and second guiding slots respectively.

15        17. The optical lens hole drilling guider, as recited in claim 1, wherein said guiding member further has two corresponding measuring marker units provided on said first and second side guiders respectively to provide a measuring length of said guiding member for adjustably measuring said optical lens held within said holding cavity, wherein said measuring length of said guiding member is selectively adjusted by sliding said second side guider from said first side guider for adjustably aligning said respective first and second guiding slot with said marking point on said optical lens.

20        18. The optical lens hole drilling guider, as recited in claim 9, wherein said guiding member further has two corresponding measuring marker units provided on said first and second side guiders respectively to provide a measuring length of said guiding member for adjustably measuring said optical lens held within said holding cavity, wherein said measuring length of said guiding member is selectively adjusted by sliding said second side guider from said first side guider for adjustably aligning said respective first and second guiding slot with said marking point on said optical lens.

25        19. The optical lens hole drilling guider, as recited in claim 12, wherein said guiding member further has two corresponding measuring marker units provided on said first and second side guiders respectively to provide a measuring length of said guiding member for adjustably measuring said optical lens held within said holding cavity, wherein said measuring length of said guiding member is selectively adjusted by sliding said second side guider from said first side guider for adjustably aligning said respective first and second guiding slot with said marking point on said optical lens.

20. The optical lens hole drilling guider, as recited in claim 16, wherein said first guiding slot is a circular through hole and said second guiding slot is an elongated through slot.

21. The optical lens hole drilling guider, as recited in claim 20, wherein said  
5 guiding member further has two corresponding measuring marker units provided on said first and second side guiders respectively to provide a measuring length of said guiding member for adjustably measuring said optical lens held within said holding cavity, wherein said measuring length of said guiding member is selectively adjusted by sliding said second side guider from said first side guider for adjustably aligning said respective  
10 first and second guiding slot with said marking point on said optical lens.

22. The optical lens hole drilling guider, as recited in claim 1, wherein said first guiding slot is a circular through hole and said second guiding slot is an elongated through slot.

23. The optical lens hole drilling guider, as recited in claim 22, wherein said  
15 guiding member further has third and fourth guiding slots formed on said first side guider to communicate with said holding cavity, wherein said third guiding slot is a circular through hole and said fourth guiding slot is an elongated through slot, wherein said third and fourth guiding slots are arranged for selectively aligning with said marking point of said optical lens to guide said drilling tool penetrating said optical lens at said marking  
20 point through said respective third and fourth guiding slot so as to form said through slot on said optical lens.

24. The optical lens hole drilling guider, as recited in claim 9, wherein said first guiding slot is a circular through hole and said second guiding slot is an elongated through slot.

25. The optical lens hole drilling guider, as recited in claim 24, wherein said  
25 guiding member further has third and fourth guiding slots formed on said first side guider to communicate with said holding cavity, wherein said third guiding slot is a circular through hole and said fourth guiding slot is an elongated through slot, wherein said third and fourth guiding slots are arranged for selectively aligning with said marking point of  
30 said optical lens to guide said drilling tool penetrating said optical lens at said marking

point through said respective third and fourth guiding slot so as to form said through slot on said optical lens.

26. The optical lens hole drilling guider, as recited in claim 16, wherein said first guiding slot is a circular through hole and said second guiding slot is an elongated through slot.

27. The optical lens hole drilling guider, as recited in claim 26, wherein said guiding member further has third and fourth guiding slots formed on said first side guider to communicate with said holding cavity, wherein said third guiding slot is a circular through hole and said fourth guiding slot is an elongated through slot, wherein said third and fourth guiding slots are arranged for selectively aligning with said marking point of said optical lens to guide said drilling tool penetrating said optical lens at said marking point through said respective third and fourth guiding slot so as to form said through slot on said optical lens.

28. The optical lens hole drilling guider, as recited in claim 20, wherein said first guiding slot is a circular through hole and said second guiding slot is an elongated through slot.

29. The optical lens hole drilling guider, as recited in claim 28, wherein said guiding member further has third and fourth guiding slots formed on said first side guider to communicate with said holding cavity, wherein said third guiding slot is a circular through hole and said fourth guiding slot is an elongated through slot, wherein said third and fourth guiding slots are arranged for selectively aligning with said marking point of said optical lens to guide said drilling tool penetrating said optical lens at said marking point through said respective third and fourth guiding slot so as to form said through slot on said optical lens.

30. The optical lens hole drilling guider, as recited in claim 9, wherein said base member further comprises a lens blocker disposed within said holding cavity for blocking a sideward movement of said optical lens within said holding cavity, wherein said lens blocker is affixed on said base member for biasing a side edge of said optical lens to prevent a lateral movement of said optical lens within said holding cavity.

31. The optical lens hole drilling guider, as recited in claim 16, wherein said base member further comprises a lens blocker disposed within said holding cavity for blocking a sideward movement of said optical lens within said holding cavity, wherein said lens blocker is affixed on said base member for biasing a side edge of said optical lens to prevent a lateral movement of said optical lens within said holding cavity.

32. The optical lens hole drilling guider, as recited in claim 25, wherein said base member further comprises a lens blocker disposed within said holding cavity for blocking a sideward movement of said optical lens within said holding cavity, wherein said lens blocker is affixed on said base member for biasing a side edge of said optical lens to prevent a lateral movement of said optical lens within said holding cavity.